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Notice of Allowability	Application No.	Applicant(s)	
	10/521,178	YONEMARU, KIYOHARU	
	Examiner	Art Unit	
	Dana Ross	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 11 December 2006.
2. ☒ The allowed claim(s) is/are 4,8-10 and 14-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|---|

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph Bach on 11 January 2007.

The application has been amended as follows:

In the Claims:

Claims 1-3 and 11-13 are cancelled.

Claim 16 is amended to depend from claim 4.

Allowable Subject Matter

2. Claims 4, 8-10 and 14-16 are allowed.
3. The following is an examiner's statement of reasons for allowance: The prior art neither anticipates nor renders obvious a method of processing a screw rotor as claimed in independent claim 1, specifically wherein the combination of limitations includes roughly cutting the groove on the outer surface of the workpiece using a tool having an end mill and a round end mill and a second step of shaving the left, right and bottom surfaces of the groove, wherein a shaving bit having two blades set at different angles is used for shaving the left and right surface respectively and a round bit is used for shaving the bottom surface.

As stated in the previous office action, multiple axis machine tools are well known in the art along with the machining of screw rotors.

Applicant has amended the independent claim to incorporate the combination of limitations for the method that is not found in the prior art.

The closest prior art is AAPA, Ito et al., Jensen and Iriguchi et al. as is discussed in detail in the previous office action.

Neither AAPA, Ito et al., Jensen nor Iriguchi et al. teach the specific steps of machining that includes the combination of limitations of roughly cutting the groove on the outer surface of the workpiece using a tool having an end mill and a round end mill and a second step of shaving the left, right and bottom surfaces of the groove, wherein a shaving bit having two blades set at different angles is used for shaving the left and right surface respectively and a round bit is used for shaving the bottom surface.

Therefore the prior art does not anticipate the claimed invention.

Furthermore, there is no motivation found to modify the prior art to obtain the claimed invention. Additionally, to make the required modifications to the prior art would require hindsight.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

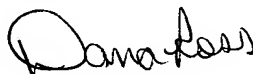
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dana Ross
Examiner
Art Unit 3722



dmr

Approved
DE 12/21/06

12/11/2006 17:29 6506258110

SUGHRUE MION

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Atty. Docket No. Q86241; Inventor: Kiyoharu YONEMARU.; Filed: January 14, 2005
Title: DEVICE AND METHOD FOR PROCESSING SCREW ROTOR, AND CUTTING TOOL
Page 2 of 2

REPLACEMENT DRAWING SHEET

FIG. 16 (A)
PRIOR ART

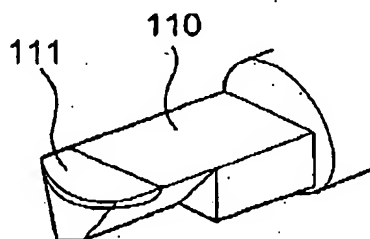


FIG. 16 (B)

